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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,423	09/27/2001	Amos Nussinovitch	919 1002	7772

21831 7590 04/22/2003

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EXAMINER

NAFF, DAVID M

ART UNIT	PAPER NUMBER
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1651

DATE MAILED: 04/22/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

01/856423

Applicant(s)

Kussinovich et al

Examiner

Kafu

Group Art Unit

1657

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period of Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 1/22/03
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-20 is/are pending in the application.
- Of the above claim(s) 12 + 15-20 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-11, 13 + 14 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) filed 9/27/01
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

In a response of 1/27/03 to a restriction requirement of 12/17/02, applicants elected Group I claims 1-10, 13 and 14 with traverse.

In the traverse, applicants urge that Groups I, II and III are not independent and distinct, and are only obvious variations of the same invention. However, different inventions do not have to be independent for restriction. Inventions need only be distinct and have a separate status in the art as shown by separate classification. In the present case, as stated in the restriction requirement, inventions I, II and III are distinct due to differences in the claims, and have separate classification. The variations of inventions I, II and III as required by the claims are of such extent as not to be obvious variations. Accordingly, the restriction requirement is adhered to and made final.

Claims 12 and 15-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 9 of 1/27/03.

Claims 1-11, 13 and 14 are examined on the merits.

Claim Objections

Claim 7 and 10 are objected to because of the following informalities: *Xenopus laevis* should be underlined in claim 7 as in the specification, and in line 2 of claim 10, -- the -- should be inserted before "KCl". Appropriate correction is required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6, 8-11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nussinovitch et al (6,068,867) in view of Soon-Shiong et al (5,762,959) and Dorian et al (5,693,514).

The claims are drawn to coating a cell by placing the cell in a hydrocolloid solution, removing the cell from the solution and placing the cell in a cross-linking solution to provide the cell with a thin coat of the hydrocolloid.

Nussinovitch et al disclose coating various materials such as bulbs, fungi, etc. (Col 3, lines 1-4) by placing material in a hydrocolloid solution such as an alginate solution, allowing excess solution to drip from the material and immersing the material in a gel inducing agent such

as chloride salt or calcium salt. For example, see col 1, line 42 to col 3, line 20, and Examples 1 and 2.

Soon-Shiong et al disclose microencapsulation of cells in alginate and Dorian et al disclose using non-fibrogenic high mannuronate alginate to coat transplants such as pancreatic islets.

It would have been obvious to apply the alginate coating procedure of Nussinovitch et al to a cell in view of Soon-Shiong et al microencapsulating cells in alginate and Dorian et al coating islets with high mannuronate alginate, and since Nussinovitch et al disclose using the coating procedure to coat different materials including fungi.

Claim Rejections - 35 USC § 103

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1-6, 8-11, 13 and 14 above, and further in view of Jorgensen et al (5,293,838).

The claim requires the cell to be a Xenopus laevis egg or embryos.

Jorgensen et al disclose protecting an egg by encapsulating the egg in a gel material (col 1, lines 54-60).

When applying the coating procedure of Nussinovitch et al to a cell as set forth above, it would have been obvious to applying the coating to a Xenopus laevis egg or embryos to obtain the protective function of the coating as suggested by Jorgensen et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff whose telephone number is (703) 308-0520. The examiner can normally be reached on

Monday-Thursday and every other Friday from about 8:30 AM to about 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, a message can be left on voice mail.


- 5 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn, can be reached at telephone number (703) 308-4743.

The fax phone number is (703) 872-9306 before final rejection or (703) 872-9307 after final rejection.

- 10 Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

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DMN
4/19/03


DAVID M. NAFF
PRIMARY EXAMINER
ART UNIT 12651